AMENDMENTS TO THE CLAIMS:

1. (Currently amended) A method for revising wiring of a circuit to prevent electro-migration, said method comprising ~~the steps of~~:

for each net in said circuit, identifying each branch point in said net;

calculating a current density at ~~a~~ each said branch point of ~~a~~ said net;

determining whether or not said current density exceeds a limit value; and

revising a wiring which affects said current density in order to reduce said current density if said current density exceeds said limit value.

2. (Original) The method as set forth in claim 1, wherein said limit value is determined to prevent said electro-migration.

3. (Currently amended) The method as set forth in claim 1, wherein said limit value depends on a drive ability of a device which drives said net.

4. (Currently amended) The method as set forth in claim 1, wherein said limit value depends on a resistance of an interval of said net, said interval ending at said branch.

5. (Currently amended) The method as set forth in claim 1, wherein the revising said wiring ~~is~~ comprises reducing a resistance of an interval of said net, said interval ending at said branch.

6. (Currently amended) The method as set forth in claim 5, wherein the reducing the

resistance of said interval is comprises widening a conductor in said interval.

7. (Currently amended) The method as set forth in claim 1, further comprising ~~a step of~~ :

tracing said net to obtain said branch.

8. (Currently amended) An apparatus for revising wiring of a circuit to prevent electro-migration, said apparatus comprising:

means for identifying, in each net of said circuit, all branch points in said net and calculating a current density at ~~a~~ each said branch point of ~~a~~ said net;

means for determining whether or not said current density exceeds a limit value; and

means for revising a wiring which affects said current density in order to reduce said current density if said current density exceeds said limit value.

9. (Original) The apparatus as set forth in claim 8, wherein said limit value is determined to prevent said electro-migration.

10. (Currently amended) The apparatus as set forth in claim 8, wherein said limit value depends on a drive ability of a device which drives said net.

11. (Currently amended) The apparatus as set forth in claim 8, wherein said limit value depends on a resistance of an interval of said net, said interval ending at said branch.

12. (Currently amended) The apparatus as set forth in claim 8, wherein the means for

revising said wiring ~~is~~ comprises means for reducing a resistance of an interval of said net, said interval ending at said branch.

13. (Currently amended) The apparatus as set forth in claim 12, wherein the means for reducing the resistance of said interval ~~is~~ comprises means for widening a conductor in said interval.

14. (Currently amended) The apparatus as set forth in claim 8, further comprising:

means for tracing said net to obtain said branch.

15. (Currently amended) A computer program product embodied on a computer-readable medium and comprising codes that, when executed, ~~causes~~ cause a computer to ~~perform the steps of~~:

for each net in said circuit, identify each branch point in said net;

~~calculating~~ calculate a current density at ~~a~~ each said branch point of ~~a~~ said net;

~~determining~~ determine whether or not said current density exceeds a limit value; and

~~revising~~ revise a wiring which affects said current density in order to reduce said current density if said current density exceeds said limit value.

16. (Original) The computer program product as set forth in claim 15, wherein said limit value is determined to prevent said electro-migration.

17. (Currently amended) The computer program product as set forth in claim 15,

wherein said limit value depends on a drive ability of a device which drives said net.

18. (Currently amended) The computer program product as set forth in claim 15, wherein said limit value depends on a resistance of an interval of said net, said interval ending at said branch.

19. (Currently amended) The computer program product as set forth in claim 15, wherein the revising said wiring ~~is~~ comprises reducing a resistance of an interval of said net, said interval ending at said branch.

20. (Currently amended) The computer program product as set forth in claim 19, wherein the reducing the resistance of said interval ~~is~~ comprises widening a conductor in said interval.

21. (Currently amended) The computer program product as set forth in claim 15, wherein said codes further ~~causes~~ cause the computer to perform a ~~step of~~ tracing of said net to obtain said branch.